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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,273	12/21/2001	Hemant Singh	CISCP274	8097
22434	7590	08/23/2005	EXAMINER	
BEYER WEAVER & THOMAS LLP			DYKE, KERRI M	
P.O. BOX 70250			ART UNIT	
OAKLAND, CA 94612-0250			PAPER NUMBER	
			2667	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/026,273		SINGH ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Kerri M. Dyke		2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 December 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 17, and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/02/2002</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: the “communication diagram” referred to as element 200 on page 13, the “communication diagram” referred to as element 300 on page 17, and “telephony” referred to as element 631 on page 21. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 1 element 120 and Figure 4 element 661. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in

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the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claims 4-5 and 17-18 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 4-5 and 17-18 are dependent upon claims 2 and 16, respectively. Both recite limitations to indicate the first type of data message, but the first type of data message is already specified in claims 2 and 16.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 30 recites the limitation "computer system" in line 1. There is insufficient antecedent basis for this limitation in the claim. Claim 30 refers back to claim 27, which is for a computer program product, not a computer system.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over PacketCable™ in view of Kung et al. (US 6, 917,610).

In regards to claim 1, PacketCable™ discloses in figure 4 on page 18 a method for translating communication data within a call endpoint system in a cable network, comprising: within a first call endpoint system, receiving a first data sent by a first user agent to a second user agent, the first data using a first communication protocol, the first user agent being part of the first call endpoint system and the second user agent being part of a second call endpoint system; and within the first call endpoint system, initiating one or more second data transactions) with one or more intermediary cable components within the cable network based on such first data, the second data using a second communication protocol that is also utilized by the one or more cable components, the one or more intermediary cable components being configured to send one or more third data based on the second data or other data sent by the first agent to the second user agent, wherein one of the first or second call endpoint systems is an originator of a particular call and the other of the first and second call endpoint system is a terminator of the particular call, and the first and second data forms part of the particular call. It does not disclose the translator being located within the endpoint system.

Kung et al. discloses an endpoint system that includes a translator. It would have been obvious to one of ordinary skill in the art to include the translator as taught by Kung et al. in the endpoint system taught by PacketCable™.

The motivation for doing so is to allow for communication with various disparate systems (e.g. legacy systems) as taught by Kung et al. in column 6 lines 62-64.

In regards to claim 6, PacketCable™ and Kung et al. disclose the method of claim 1. PacketCable™ further discloses wherein the first protocol is Network-based Call Signaling (NCS) protocol and the second protocol is Session Initiation Protocol (SIP) (Figure 4 on page 18).

In regards to claim 7, PacketCable™ and Kung et al. disclose the method of claim 1. PacketCable™ further discloses wherein the first user agent is configured within a first customer premises equipment (CPE) and the second user agent is configured within a second CPE, the one or more other cable components including a call management server. The user agents are connected to media terminal adapters (figure 1, page 9), which are located in the customer premises as disclosed on page 13. The MTA are shown connected to a CMS, which stands for call management server as disclosed on page 12.

In regards to claim 8, PacketCable™ and Kung et al. disclose the method of claim 1. PacketCable™ further discloses in figure 4 on page 18 the method further comprising: within the first call endpoint system, receiving a fourth data sent from the one or more intermediary cable components to the first user agent, the fourth data using the second protocol; within the first call sending a response to the one or more intermediary cable components, the response using the endpoint system, when the fourth data requires a response, second protocol; and within the first

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call endpoint system, initiating one or more fifth data transaction(s) with the first user agent based on the fourth data, the fifth data using the first protocol.

Claim 14 is for a computer system with one or more processor and one or more memory operable to execute the method of claim 1. PacketCable™ and Kung et al. disclose the method of claim 1. PacketCable™ does not disclose a computer system.

Kung et al. discloses a computer system with a processor (figure 3 element 306) and memory (figure 3 elements 330 and 322).

It would have been obvious to one of ordinary skill in the art to include the computer system disclosed by Kung et al. in the endpoints taught by PacketCable™. The motivation for adding a processor is given in column 20 lines 28-31. The inclusion of the processor allows for a wider selection of functions. The motivation for adding memory is given in column 22 lines 1-3. The addition of memory allows for an adaptable and upgradeable end device.

In regards to claim 19, PacketCable™ and Kung et al. disclose the computer system of claim 14. PacketCable™ further discloses wherein the first protocol is Network-based Call Signaling (NCS) protocol and the second protocol is Session Initiation Protocol (SIP) (Figure 4 page 18).

In regards to claim 20, PacketCable™ and Kung et al. disclose the computer system of claim 14. PacketCable™ further discloses wherein the first user agent is configured within a first customer premises equipment (CPE) and the second user agent is configured within a second CPE, the one or more other cable components including a call management server, wherein the computer system forms part of the first CPE (see claim 7 rejection, above).

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In regards to claim 21, PacketCable™ and Kung et al. disclose the computer system as recited in claim 14, wherein at least one of the processors and memory are further adapted to within the first call endpoint system: receive a fourth data sent from the one or more intermediary cable components to the first user agent, the fourth data using the second protocol', when the fourth data requires a response, send a response to the one or more intermediary cable components, the response using the second protocol; initiate one or more fifth data transactions) with the first user agent based on the fourth data, the fifth data using the first protocol. (See claim 8 rejection, above, and figure 4 page 18 of PacketCable™.)

Claim 27 is for a computer program product on at least one computer readable medium that contains instructions for the method of claim 1. PacketCable™ and Kung et al. disclose the method of claim 1. PacketCable™ does not disclose the use of a computer program product.

Kung et al. disclose in column 22 lines 8-9 that adding cards, or computer readable medium can upgrade the memory of the endpoint system. It is also well known in the art and would have been obvious to update the memory using instructions contained on a CD, floppy disk, or other, more portable, computer readable medium.

It would have been obvious to one of ordinary skill in the art to increase the capabilities of the endpoint devices taught by PacketCable™ by including the possibility of upgrading using computer readable medium as taught by Kung et al.

The motivation for doing so would be to enable users to expand the capabilities of the end system as taught by Kung et al. in column 22 lines 3-7.

In regards to claim 29, PacketCable™ and Kung et al. disclose the computer program product of claim 27. PacketCable™ further discloses wherein the first protocol is Network-

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based Call Signaling (NCS) protocol and the second protocol is Session Initiation Protocol (SIP).

See figure 4, page 18 of PacketCable™ and the rejections of claims 6 and 19.

In regards to claim 20, PacketCable™ and Kung et al. disclose the computer program product of claim 27. PacketCable™ further discloses wherein the first user agent is configured within a first customer premises equipment (CPE) and the second user agent is configured within a second CPE, the one or more other cable components including a call management server. See the rejections of claims 7 and 20.

In regards to claim 31, PacketCable™ and Kung et al. disclose the computer program product of claim 27, wherein the computer program instructions stored within the at least one computer readable product are further configured to within the first call endpoint system: to receive a fourth data sent from the one or more intermediary cable components to the first user agent, the fourth data using the second protocol; when the fourth data requires a response, send a response to the one or more intermediary cable components, the response using the second protocol; initiate one or more fifth data transaction(s) with the first user agent based on the fourth data, the fifth data using the first protocol. See the rejections of claims 8 and 21.

Claim 32 is related to an apparatus to perform the method of claim 1. PacketCable™ and Kung et al. disclose the method of claim 1. PacketCable™ does not disclose an apparatus.

Kung et al. further discloses an apparatus described as the broadband residential gateway. It is shown in detail in figure 3 and is represented as element 300 in figure 4. Its operation is described in section B, which begins on line 38 of column 17 and ends on line 16 of column 23.

It would have been obvious to one of ordinary skill in the art to bundle the devices taught by PacketCable™ into the BRG as taught by Kung et al. The motivation for doing so is given in

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column 4 lines 66-67 and column 5 line 1. Locating everything into one apparatus allows for centralization of maintenance and control.

In regards to claims 2, 9, 15, 22, 28, and 33, PacketCable™ and Kung et al. disclose the base inventions in claims 1, 8, 14, 21, 27, and 32. They do not explicitly express the first protocol as SIP and the second as NCS. (Although PacketCable™ is illustrated in figure 4 on page 18 using a NCS device and SIP network, the overall concept of protocol translation is applicable to many protocol combinations.) Kung et al. does show the BRG connected to the cable network. It is disclosed by the applicant in the background of the invention that the cable industry standard is NCS. It is also disclosed in column 19 lines 18-22 that the BRG can utilize SIP for telephony applications. If the BRG is configured to use SIP then the first protocol would be SIP and the second protocol would be NCS.

It would have been obvious to one of ordinary skill in the art to use the method taught by PacketCable™ to communicate using SIP enabled end devices with a NCS network as taught by Kung et al.

The motivation for doing so would be to allow for a wider range of usefulness, regardless of the protocol used by the network or endpoint.

Claims 3-5, 10-13, 16-18, and 23-26 are related to the specific message data needed to setup and disconnect a call. (The necessary base claim rejections are either included here or given above.) The procedure for a call in either NCS or SIP is well known and documented in the art. It would have been obvious to one of ordinary skill in the art that the same messages, with translation, would be needed to establish a hybrid NCS to SIP call. Although figure 4 on page 18 of PacketCable™ illustrates the NCS to SIP example it would have been obvious to one

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of ordinary skill in the art that the messages simply could have been switched to illustrate the SIP to NCS case. Although the specific NCS signaling is not disclosed, the content and procedure necessary for call setup in NCS is well known and it therefore would have been obvious to one of ordinary skill in the art for the second data to be either NTFY(digits), NTFY(OnHook), or DSA-REQ and for the fourth data to be either CRCX, MDCX, DSC-ACK.

In regards to claim 34, PacketCable™ and Kung et al. disclose the apparatus of claim 33. PacketCable™ further discloses means for receiving a fourth data sent from the one or more intermediary cable components to the first user agent, the fourth data using the second protocol; means for when the fourth data requires a response, sending a response to the one or more intermediary cable components, the response using the second protocol; and means for initiating one or more fifth data transactions) with the first user agent based on the fourth data, the fifth data using the first protocol. See figure 4 page 18 and the rejections of claims 8, 21, and 31.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kerri M. Dyke whose telephone number is (571) 272-0542. The examiner can normally be reached on Monday through Friday, 8:10 am - 4:15 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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kmd

KWANG BIN YAO  
PRIMARY EXAMINER

